Golder Associates Inc.
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April 8, 2009

Ref: 063-2332 Phase 0008

Mr. Tom Leck, Project Manager
New Mexico Environment Department
Petroleum Storage Tank Bureau
5500 San Antonio, NE, Albuquerque, NM

Subject: **Remediation Equipment (SVE Blower Module) - Deliverable ID 15296-17**
Thriftway 220, 609 E. 20th, Farmington, New Mexico
Facility ID: 29521 Release ID: 2035 WPID: 15355

Dear Mr. Leck:

Golder Associates Inc. (Golder), has prepared this letter to report delivery and installation of the SVE Blower Module (see attached photographs). The SVE blower replaces the thermal oxider system that was removed from service. The skid mounted unit includes a Roots Universal RAI® 47 Rotary Positive Blower with a 15 horsepower explosion proof motor (3-phase 230/460 volt), Carbonair® moisture tank, and Carbonair® control panel. The Roots blower was re-furbished by King Remediation Systems (KRS). KRS tested the blower and provided Golder a test curve. Attached are the manufacturer's literature and KRS's blower test curve results.

The SVE Blower is in-place but no pipe or electrical connections have been made at this time. To complete the installation the following work is still required:

- Connect SVE header to inlet of blower.
- Install emissions stack ("flag pole"). The materials for the emissions stack are inside the fenced compound and in the control building.
- Connect blower outlet to the flag pole.
- Complete electrical connections.
- Start-up and test the blower unit.

Additionally, a New Mexico Environment Department (NMED) Air Quality Bureau (AQB) Notice of Intent needs to be submitted to document this change, before the new equipment is put into service. Prior to NMED's notice to stop work on this project, we had communicated with AQB and partially completed the NOI form.

If you have questions or comments, please contact me at (505) 821-3043.

Sincerely,

Robert Ederer, P.E.
Project Manager

for Bob Newcomer

Bob Newcomer, R.G.
Managing Associate

Attachments: Photographs
Blower Manufacturer's Literature
Blower Test Results

SVE BLOWER MODULE PHOTOGRAPHS (April 30, 2009)
Thriftway 220, FARMINGTON, NM

Photo 1 – SVE Module (View South-West)

Photo 2 – SVE Manifold (View South-East)

Photo 3 – SVE Module (View North)

SPECIFICATIONS

compressors exhausters ROOTS™ blowers

ROOTS™ UNIVERSAL RAI®
ROTARY POSITIVE BLOWERS
Frames 22 thru 718

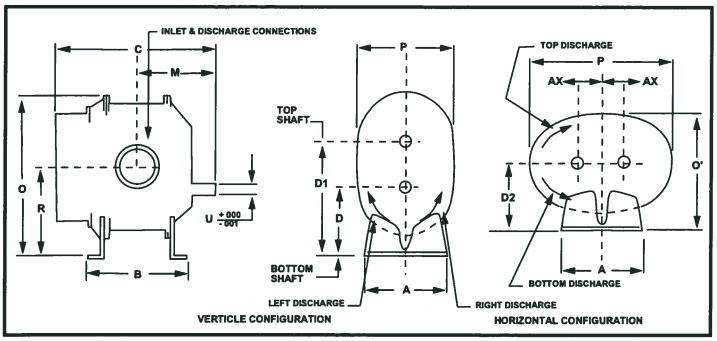
BASIC BLOWER DESCRIPTION

Universal RAI® blowers are heavy-duty rotary blowers designed with detachable rugged steel mounting feet that permit easy, in-field adaptability to vertical or horizontal installation requirements.

Because of the detachable mounting feet, these units can be easily adapted to any of four drive shaft positions: right, left, bottom, or top. The compact, sturdy design is engineered for continuous service when operated in accordance with speed and pressure ratings.

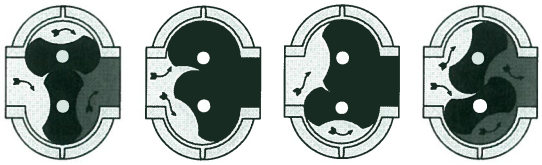
The basic model consists of a cast iron casing, carburized and ground alloy steel spur timing gears secured to steel shafts with a taper mounting and locknut, and cast iron involute impellers. Oversized antifriction bearings are used, with a cylindrical roller bearing at the drive shaft to withstand V-belt pull. The Universal RAI® features splash oil lube on the gear end and grease lube on the drive end. ROOTS' exclusive "figure-eight" gearbox design improves oil distribution to maximize gear and bearing life. After testing, the unit is sprayed with a protective paint, and boxed or skid mounted for delivery.

Available accessories include driver, relief valve, inlet and discharge silencers, inlet filter, check valve, extended base, V-belt or flexible coupling and drive guards.



Frame	A	A'	B	C	D	D1	D2	M	O	O'	P	P'	R	U	INLET DISCH.	AX	WGT
22U	5.13	5.13	5.00	9.75	3.75	6.25	3.75	5.13	9.63	6.88	6.25	9.25	5.00	.625	1.0 NPT	1.25	32
24U	5.13	5.13	7.00	11.75	3.75	6.25	3.75	6.13	9.63	6.88	6.25	9.25	5.00	.625	2.0 NPT	1.25	43
32U	7.25	7.25	6.75	11.25	5.00	8.50	5.00	5.81	12.81	8.88	7.75	12.13	6.75	.750	1.25 NPT	1.75	69
33U	7.25	7.25	7.63	12.13	5.00	8.50	5.00	6.25	12.81	8.88	7.75	12.13	6.75	.750	2.0 NPT	1.75	74
36U	7.25	7.25	10.00	14.63	5.00	8.50	5.00	7.56	12.81	8.88	7.75	12.13	6.75	.750	2.5 NPT	1.75	102
42U	8.00	8.00	7.25	13.00	6.25	10.25	6.25	6.86	15.06	10.63	8.75	13.63	8.25	.875	1.5 NPT	2.00	88
45U	8.00	8.00	10.00	15.50	6.25	10.25	6.25	8.00	15.06	10.63	8.75	13.63	8.25	.875	2.5 NPT	2.00	109
47U	8.00	8.00	11.75	17.63	6.25	10.25	6.25	9.25	15.06	10.50	8.50	13.63	8.25	.875	3.0 NPT	2.00	128
53U	10.50	10.50	8.38	15.38	6.25	11.25	6.75	8.18	17.38	11.88	10.25	17.25	8.75	1.125	2.5 NPT	2.50	143
56U	10.50	10.50	11.00	18.00	6.25	11.25	6.75	9.19	17.38	12.25	11.00	17.25	8.75	1.125	4.0 NPT	2.50	170
59U	10.50	10.50	14.00	21.18	6.25	11.25	6.75	11.19	17.38	12.25	11.00	17.25	8.75	1.125	4.0 NPT	2.50	204
65U	11.00	11.00	10.00	18.38	8.75	14.75	8.75	9.19	21.63	15.13	12.75	19.75	11.75	1.375	3.0 NPT	3.00	245
68U	11.00	11.00	13.00	21.38	8.75	14.75	8.75	10.82	21.63	15.13	12.75	19.75	11.75	1.375	5.0 NPT	3.00	285
615U	11.00	11.00	20.00	28.38	8.75	14.75	8.75	14.32	21.63	16.25	15.00	19.75	11.75	1.375	6.0 FLG	3.00	425
76U	14.00	21.00	11.75	19.94	11.00	18.00	11.00	10.00	26.13	20.69	19.38	23.25	14.50	1.562	4.0 NPT	3.50	400
711U	14.00	21.00	16.75	25.19	11.00	18.00	11.00	12.75	26.13	19.50	17.00	23.25	14.50	1.562	6.0 FLG	3.50	530
718U	14.00	21.00	23.75	32.19	11.00	18.00	11.00	16.25	26.13	19.50	17.00	23.25	14.50	1.562	8.0 FLG	3.50	650

OPERATING PRINCIPLE



Two figure-eight lobe impellers mounted on parallel shafts rotate in opposite directions. As each impeller passes the blower inlet, it traps a definite volume of air and carries it around the case to the blower outlet, where the air is discharged. With constant speed operation, the displaced volume is essentially the same regardless of pressure or temperature.

Timing gears control the impellers relative positions and maintain small but definite clearances. This allows operation without lubrication requirements inside the unit casing.

DRESSER Roots

S-12K84
September 2003

BLOWER TEST RESULTS
BLOWER CONSIDERED FOR SOIL VAPOR EXTRACTION AT THRIFTWAY 220, FARMINGTON, NEW MEXICO

Vacuum	Flowrate	Temperature	Temperature Adjustment	Altitude	Altitude Adjustment	Flowrate
in w.c.	acfm	degrees F	unitless	ft amsl	unitless	scfm
0	300	80	0.91	3,500	0.88	241
14	290	80	0.91	3,500	0.88	232
20	285	80	0.91	3,500	0.88	228
30	277	80	0.91	3,500	0.88	222
40	265	80	0.91	3,500	0.88	212

The blower was tested using pitot tube and magnehelic gauge in Lubbock, TX
Data was communicated by A. Izard to V. Mustafin over the phone on June 30, 2008